REMARKS

Related cases

Applicant notes without prejudice for clarification that there are two other related cases, parent application serial no. 09/371,474 filed 8/10/1999, of which this is a continuation application, and a divisional of the parent application; serial no. 09/925,923, filed 8/9/2001, both also unintentionally abandoned with office actions pending, as was this case. For efficiency and economy of effort and cost, Applicant is filing a response and petition to revive in only this case. However, it should be noted that some objections raised herein have been previously addressed and accepted by the Office in the related prosecutions and those prosecutions are here invoked for reference.

Likewise, Applicant notes for clarification that in a related case filed in the European Patent Office, application no. 00952692.2-2124, having substantially the same specification as the '474 parent application and this application, there issued a *notice of intent to grant* a European patent on a 21 claim set; herein presented substantially as allowed in the EP case as new claims 67-81, for consideration by the Office. The claims are fully supported by the subject matter in this specification and raise no new issues.

NOTE, in the sections that follow the number in parenthesis preceding the following paragraphs is taken from the corresponding paragraph number in the office correspondence to with the respective paragraphs herein are directed.

Prior Amendments Acknowledged

(1) The Office acknowledged prior amendments A and B, papers 3 and 4, and pending claims as 8-25 and 41-66.

Drawings

(2) Drawings were objected to for a missing reference number. Applicant has herein amended Fig. 1 to include reference #15, which as was noted in the office action did appear in

the specification. The structure now marked as 15 is clear from the context. A replacement sheet is attached. No new matter is added. The objection is thus cured.

Claims Objections

(3) Claims 9 and 60 were objected to for improper dependent form. Claim 9 has been cancelled, thus curing the objection of this claim. Claim 59, upon which claim 60 depended, was intentionally not examined by the Office. Claim 59 has been herein amended and the omission to examine has been traversed, thereby curing this objection of claim 60.

Claims Rejections - 35 USC §112 Second Paragraph

(4, 5 & 6) Claims 8, 41, 50 and 59 are rejected under 35USC112, 2nd para., for using the phrase "such as". Claims 9-25, 42-49, 51-58, and 60-66 are rejected due to their dependence on the four rejected claims.

A §112 second paragraph rejection has two separate requirements, indefiniteness and failing to claim what applicant regards as the invention. With respect to indefiniteness, the "essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a *reasonable* degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." (MPEP §2173.02). (italics added)

There is a presumption that the claims describe the applicant's invention, absent evidence to the contrary. A rejection stating that the claims fail to set forth the subject matter that the applicant regards as the invention is only appropriate where the applicant has stated that the invention is something *different* from what is defined by the claims (MPEP §2172(a)). The rule of MPEP §2173.05(d) is *not* for mere mechanical application as a rejection based solely on the use of disfavored phrases, but depends on whether or not it claims a narrower limitation in the context of these factors.

Applicant respectfully asserts that the contested phrase "such as" located in the preamble of claims 8, 41, 50, and 59, merely connotating a representative application and not being applied to the elements of the claim, does not take the claim out of the statutory bounds. The term as it is used is clearly intended and can only be reasonably interpreted by one of ordinary skill in the context of the disclosure and the prior art, to communicate that the applications to which the claimed laminate is directed, is exemplified by usages including and analogous to the relatively high strength and low weight requirements of aerostats and airships. As used herein, it provides useful illumination of what type applications are intended and therefore what art is most relevant. For example, the claimed invention read in the context of the disclosure clearly does not relate and does not extend to such applications as heart valves and other prosthetic implants, (e.g. Skelton et al's U.S. 4,340,091), as was established in the parent application prosecution. For this reason, Applicant requests the rejection be withdrawn.

In the alternative and not withstanding its above traverse of this objection, Applicant has without prejudice amended the preambles of the four affected claims as for applications "including" aerostats and airships, rather than "such as". This should overcome the mechanics of the rejection without stripping the applicant of its right to associate the nature of the intended applications with the other elements of the claim. These amendments should cure the rejection of all cited claims.

(7) Claims 20, 22, 22, 42-44, 51-53, 59 and 60 are rejected under 35USC112, 2nd para.; the phrase "helix angle consistent with a twist of 6 turns per inch in a 1500 denier yarn" alleged to be indefinite. Claims 61-66 are rejected for dependency on claim 59. *Claims 20-22, 42-44, 51-53, and 60 were not further examined on merit. The helix angle feature in claim 59 was not examined at all.*

Claims 21, 22, 43, 44, 52 and 53 have been canceled. Consistent with the prosecution in parent application 09/371,474, Applicant has herein amended the remaining affected claims to simplify the limitation to the singular common parameter, "turns per inch", which was accepted by the Office in the parent application prosecution, and should cure the rejection for all

remaining cited claims. Applicant asserts further that the claimed limitation had more than sufficient clarity as filed for search purposes, particularly in light of the prosecution history of the cited parent application, and that it is the Office 's obligation to rectify the omission in its own search.

(8) Claims 9-25, and 42-49 are rejected under 35USC112 as indefinite for the phrase "an airship laminate". The phrase has been edited in all affected claims to refer only to "a laminate", thereby curing this rejection to all cited claims.

(9) Claims 8, 41, 50, 59 are rejected under 35USC112 as indefinite for the phrase "high strength". Claims 9-25, 42-49, 51-58, and 60-66 are rejected for dependencies thereon. Applicant notes the Office to have taken offense only to the term "high strength" and not to the full term "high strength, low weight". Applicant invokes its arguments above about the paragraph 4, 5 and 6 rejections regarding "such as", and asserts further that the offending phrase is not used to describe the object of the claims elements, the "laminate", but is used in conjunction with the additional and complimentary descriptive words, "low weight". The full terminology is descriptive of the applications to which the laminate is directed. There is no indefiniteness as to the limitations of the claim in the context of the disclosure to one skilled in the art. Read, for example, the Applicant's further comments on Phillips that follow. Phillips is directed to a gasbag or bladder material used within an airship hull where permeability rather than tear strength or shear strength is the predominant issue. That is contrasted with an airship or gas bag *hull* fabric where a balance of the qualities of high strength and low weight are paramount. The complete term "high strength, low weight" in the preamble characterize the nature of the intended application in an important way that will be readily understood by those skilled in the art. For this reason, Applicant argues that this rejection should be withdrawn.

(10) Claims 8, 41, 50, and 59 are rejected under 35USC112 as indefinite for the phrase "low weight". Claims 9-25, 42-49, 51-58, and 60-66 are rejected for dependencies thereon. Applicant again invokes its arguments above about the paragraph 4, 5 and 6 rejections regarding "such as" and asserts further that the offending phrase is not used to describe the object of the

claim elements, the "laminate", but is only applied in conjunction with the term "high strength" and to the applications to which the laminate is directed. There is no indefiniteness as to the limitations of the claim in the context of the disclosure to one skilled in the art. It merely characterizes the nature of the intended application. For this reason, Applicant argues that this rejection should be withdrawn.

(11) Claims 8 and 18 are rejected under 35USC112 as indefinite for the phrase "sheet". Applicant has herein amended claims 8 and 18 to remove the offending phrase, thus curing this rejection.

(12) Claims 16 and 17 are rejected under 35USC112 as indefinite for the phrase "available crossing points formed". *These claims were not further examined on merit.* Applicant asserts that anyone minimally skilled in the art would appreciate that the number of *available crossing points* in a fabric layer consisting of warp and fill direction yarns is the number of warp and fill yarn intersections apparent in a top view of a given length of the fabric web. Applicant urges the Office to adopt this explanation if useful.

Further, anyone minimally skilled in the art would appreciate that the "forming" of a crossing point in the claimed weave construction, is where the warp and fill orientation with respect to two adjacent crossing points is changed from warp over fill to warp under fill or vice versa, and that a claim for a percentage of "available crossing points" being formed, would be equally well clear as the cited percentage of the full number of available crossing points; the remainder being potential crossing points that were not utilized or "formed". This is particularly true in light of the explanation in the specification and particularly in the context of the examples provided. Furthermore it should be more than amply understood by the Office as well, in light of the prosecution history of the related applications, which included dialogue on the same subject matter and an interview with a co-applicant's attorney.

This Applicant urges reconsideration of the cited claims in this respect and withdrawal of this rejection. *Using alternative phraseology from that provided in the specification is more*

likely to cause confusion than to clarify this already well understood aspect of the textile arts. Applicant urges the Office, if in doubt, to adopt this interpretation for purposes of this application and claims. Should the Office require it, Applicant will provide an expert inventor's declaration attesting to the validity of these assertions. In the alternative, Applicant offers the language of new claim 67 as was accepted in the EPO case, adapted to fit the other claims.

(13) Claim 20 is rejected under 35USC112 as indefinite for using the phrase "different". Applicant assume the Office to be referring to claim 19 rather than claim 20, which does not use the offending word. Claim 19 having been cancelled, this rejection is now moot.

Ex parte Slob

(14) Claims 8-11, 14-24, 41-47, 50-56, 59-64 are rejected under 35USC112 as indefinite for not setting forth composition and structure capable of meeting characteristics recited, citing to *Ex parte Slob* (PO BdApp) 157 USPQ 172.

Applicant notes Ex parte Slob to be a 1967 case wherein 35 USC112 rejections of 5 claims as indefinite and too broad were appealed. Rejections of 4 claims were upheld, the rejection of one claim was reversed. The exemplary claim 16 in the case was a process claim, reciting use of a "liquefiable substance" that was described *entirely* by desired ranges of performance or functional characteristics and having no specificity what so ever as to its actual composition. That extreme example is contrasted markedly from the instant case where the Applicant is not claiming a process and not describing a claimed composition entirely by desired ranges of performance or functional characteristics.

Furthermore, the Examiner in that case had pointed out several specific phrases with which he took issue, which provided the Board with something useful to review. Judging by the exemplary phrase in the case as reported, the rejected phrases where longer than a mere one or a couple of words taken out of context. They had enough length for a rational evaluation by the Board as to definiteness or lack thereof. In some instances the Board agreed with the Examiner; in other instances the Board did not.

In the instant case, in its paragraphs 6 – 13, Applicant asserts the Office to have over-extended the intent of 35USC112 and the rule of *Ex parte Slob* with respect to the issue of indefiniteness, in part for what appears to be a mechanical rejection of specific words irrespective of the context as is required under the Rules, especially when going to the extent of ignoring claimed subject matter and unnecessarily restricting the search parameters, and more especially in light of the prosecution history of the related applications.

Moreover, in its paragraph 14 35USC112 rejection of claims 8-11, 14-24, 41-47, 50-56, 59-64, exactly what it is that is being rejected is likewise "indefinite", at least to the undersigned. How is Applicant to respond? How is an appeal to be reviewed? Applicant has in good faith addressed other rejections with amendments and traverse which presumably address at least some of what is intended here. Applicant insists the Office provide a comprehensive statement, suitable for review on appeal according to the standard of *Ex parte Slob*, of any claims still affected by this rejection, or withdrawn the rejection.

102/103 re Mater

(15, 16 and 17) Claims 8-12, 23, 24, 41, 45-47, 50, 54-56, 59, 61-64 are rejected under 35USC102(b) as anticipated by or 103(a) as unpatentable over Mater et al. (5,118,558).

The Office has clearly misconstrued the Applicant's specification, combining two contrasting statements to draw a flatly erroneous conclusion. On page 4 of the specification the Applicant describes Mater's '558 as disclosing a thick and bulky fabric requiring very large yarns of perhaps 6-10,000 denier. The Applicant then postulates that *an alterative to Mater,* would be to use the high strength synthetic materials described in the Applicant's own '623 and '264 patents. These suggested alternatives are from the Applicant's own prior work, and post date the Mater patent considerably. (Mater was filed 2/16/1990; the Applicant's 5,565,264 was filed 8291994.) Nowhere does the Applicant credit Mater with using the construction of its own, later designs, as was alleged by the Office.

The Office then goes on to mischaracterize the Applicant's prior work of the '264 and '623 as being illustrated in Figs. 1a of each patent, when this is clearly described in those

specifications as *not* being the invention but as representative of the prior art. A close reading of either case would suggest that Fig. 2C is a better illustration of what was disclosed, and is substantially different than the structure of Fig. 1a.

Taking either of these two critical errors, or both in combination, the rational for using Mater as a basis for the 102/103 rejection falls apart. Applicant respectfully asserts that the Office's interpretation and characterization of Mater was seriously flawed and its basis for any rejection hereunder is not adequately substantiated. Applicant requests the rejection be withdrawn as to all claims cited.

102/103 re Cuccias

(18) Claims 8-13, 18, 19, 24, 25, 50, 55-58 are rejected under 35USC102(e) as anticipated by or in the alternative under 35USC103(a) as obvious over Cuccias' 6,074,722. Applicant first notes some of the rejected claims to have been amended or cancelled above.

A rejection based on anticipation requires that a single reference teach every element of the claim (MPEP § 2131). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Or stated in another way, a "claim is anticipated only if each and every element as set forth in the claim is found, . . . described in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). . . .

According to the MPEP §2143.01, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art."

Cuccias, in his US6,074,722 patent, teaches the use of bias plied material, in particular the use of high modulus fiber materials in 0 and 90 degree directions, and lower modulus fibers in the plus and minus 45 degree directions. It is quite true that the use of bias ply materials may improve tear strength in a laminate. However mixing 3 to 4 percent elongation to break fiber with

20 percent elongation fiber in the 0 and 90 degree and +45 and -45 degree directions *does not optimize tear strength.* The optimization is for tensile strength and not for tear.

The goal of Cuccias' invention of bias laminates with differential modulus is to support shear loads in the laminate: ref. col. 1, lines 25, 40 and 50. Cuccias recites that the use of bias plies of consistent modulus is known. While he does disclose that bias plies are useful for shear load he does not teach that they are helpful for improvement of tear strength. Cuccias does use the term "tear resistance" twice in his patent, in the background section at col. 1, line 15, and in the preamble of claim 1; but without other emphasis or explanation. In fact, Cuccias does not teach, offer or explain anything with respect to *tear* performance because of his emphasis on tensile strength. In fact his art teaches away from any contribution to tear performance because he requires a lower modulus in the bias ply.

While it is well known in the art that the use of bias plies has been the standard method for optimization of tear performance in inflatable structures, this not Cuccias' intent or direction with the modulus restriction that he teaches. In any event, this Applicant finds it difficult to associate methods of bias ply design for tensile strength with the use of yarn groups and optimized twist for tear strength and structural optimization. Cuccias teaches a method for optimization of tensile performance at the expense of tear strength using a known bias ply method.

It is clear to one skilled in the art that the Cuccias use of these extra plies and all the associated extra resin mass is a very different solution for an inflatable fabric than this Applicant's claimed invention. Cuccias teaches what even with hindsight is a sub-optimal tear solution using a high mass, 2 ply, bias layer design. Therefore Cuccias can not be found to anticipate Howland's single ply invention for optimal tear strength and low mass.

Cuccias discloses a radically different structure than that proposed by the Applicant, including a minimum of two different "filamentary" layers that are necessarily thicker than a single fabric layer, consume a significant volume and weight of bonding agent or resin. Nothing in Cuccias discloses or anticipates the compact structure of the Applicant wherein the thickness

of the single required core fabric layer and the resulting volume of the composite is reduced, while the integrity of the application-related mechanical parameters of the fabric is preserved as much as possible by the claimed combinations of low twist and an optimized selection of strength ratio, height to width ratio, and crossing points.

It is not reasonable to presume, as does the Office, that the limitations of aggregate strength and strength ratio, as well as the aspect ratio introduced by amendment, where inherent to Cuccias. It is the Applicant's position that there is virtually nothing in the inherently heavy Cuccias composite that anticipates or obviates the claimed subject matter of independent claims 8 and 50 as amended, or the overall weight reduction achieved by the Applicant's design.

In the language of the MPEP, Applicant can find no teaching, suggestion, or motivation in Cuccias that extends to these claims as amended or those dependent thereon. For this reason, Applicant requests reconsideration of the rejected claims.

102/103 re Phillips

(19) Claims 8, 9, 14, 16, 24, 50, 59, 62 are rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Phillips (2,712,170). Applicant invokes its prior comments concerning 102/103 rejections, the cited art and the cited claims, and responds further as follows:

The 1952 Phillips disclosure, US2,712,170, describes his process as "steamblasting" a fabric constructed with multi-filament yarns to reduce its fabric gauge and lower its porosity by spreading the component yarns forming the fabric to ribbons. The process involves first fully wetting the fabric, then compressing it between a pair of heated surfaces to a predetermined reduced thickness or gauge, while the heated surfaces are kept hotter than the heat of vaporization of the wetting liquid. The expansive force of the vaporizing moisture between the compressing surfaces is described by Phillips as an explosion of sorts within the yarns of the fabric, spreading or rearranging the fibers and filaments into more of a ribbon geometry that tends to close the interstices of the weave, thereby conforming the fabric to closer to the

constraining gauge or thickness and reducing the porosity and permeability of the weave to air other gases such as Helium.

Col 2, line 48: "... a steam blasted woven textile fabric which will require, by reason of its reduced porosity, a much smaller quantity of coating compound to render it impervious to gases, vapors and liquids than would be required by the same fabric which has not been steam blasted." (Ref figs. 2, 4, 6, 7.) The Phillips process is alleged to be applicable to any type of weave or fabric construction or type of yarn, but noted to work best with yarns that can be easily wetted with water or other liquid that vaporizes readily with the application of heat. The process is obviously not applicable to mono-filament yarn fabrics.

Judging from the description of the preferred embodiment and the examples given, the fabric is subjected to a mechanical compression to in the order of 1/2 the thickness of the original fabric during the application of the Phillips process, in order to affect the desired reduction in gauge or thickness. Phillips is silent with respect to the pressure of compression of the plates on the fabric to compress it to the reduced gauge. However, as noted further below and as would be readily apparent to anyone skilled in the art, this would likely cause serious damage to the fibers and dramatically effect the fabric strength.

Reflecting on the Phillips disclosure; it is correct that Phillips teaches reduction in gauge, decrease in porosity and a method to reduce the size of interstices in fabrics of various weaves, twists and fiber types. In the period of Phillips, the use of rubber coated fabrics for Helium (He) holding applications was the norm. There were no other systems to choose from; PET, PU and floropolymer films were not available. The use of 7.6-9.8 oz of neoprene coating is taught in Phillips, e.g. col. 7, line15. The lower value is notable because the methods taught in the Phillips patent are used to reduce this coating mass by 2.2 oz to achieve the lower of the two comparable results.

This neoprene coating is applied to achieve acceptable He permeability control for airship applications. Current technology (See Cuccias '722) uses films like PET to achieve He permeability control. With PET film one would only need 1.5-2.5 oz of film to achieve a 1-2

liter/m^2/bar/24hour perm result on a laminate. This value is typical of He permeability requirements for airships. The art Phillips is teaching, is about preparation of fabrics to reduce the coating weight for permeability controlled fabrics before the invention of polymer films.

In the Goodyear Zeppelin period, the coated fabric was the helium barrier. As a result the structural considerations in coated fabric design were secondary to the control of permeability. Phillips is not teaching about structural optimization of the load-carrying layer in an airship hull fabric. It is known in the industry that the fabrics that he teaches are in fact the Ballonet materials and not the hull material. The Ballonet is a gas bladder designed for He permeability control and used for control of airship altitude. It does not carry the loads and mechanical stress that the hull materials are subject to in the present class of materials.

Phillips discusses the topics or uses the terms of permeability control, interstice size reduction, and thickness or gauge reduction in at least 12 places in the patent: e.g. col. 1, line 55 (1/55); 2/50; 3/10; 3/20; 3/30; 3/35; 5/20; and in claims 1, 8, 9, and 10. However, distinct from this Applicant's disclosure, Phillips never refers to or considers the *tear strength* of a fabric. All of the art that he teaches has a very negative impact on tear strength. In fact, as is well understood in the art, the steam blast process and other calendaring processes for gauge reduction are well known to *reduce tear strength in proportion to the reduction in gauge and porosity.* It is not uncommon for these processes to reduce FAA (Federal Aviation Administration standards) slit tear strength by more than half. Phillips teaches the key benefits of his process in his discussion as providing gas permeability control and coating weight reduction. He does not suggest, anticipate or imply improvements to structural performance such as tear strength, because his art is destructive of and teaches away from this result.

Referring to Phillips col. 4, lines 40 an 45; these references teach the benefit of a thinner, less porous fabric, namely, improved resistance to He permeability with less coating mass. But Phillips by his process is teaching away from this Applicant's invention for improved tear and structural performance. The Office suggests that Phillips is presuming the optimization of yarn groups and strengths ratios for tear and structural performance. This cannot be the case because the steam blast method is known and intended to optimize coating permeability *at the expense* of

tear strength. The fact that Phillips does not concern itself with tear strength is evidenced by the fact that it is not once mentioned in the steam blast patent.

Finally, Phillips has four independent claims relating to fabric thickness, permeability, or porosity reduction. Not one reference is made to tear or structural performance in the claims. Based on the specification, claims, and awareness of the evolution of this field of art, no one skilled in the art would interpret Phillips as contributing to the improvement of tear and structural performance in an airship fabric.

Current practice using films for permeability control allows the Applicant to optimize load-carrying fabrics for structural performance in the design of inflatable structures. He permeability is important and Phillips teaches to this area of art. Just as important today as He permeability, is the tensile and tear performance of an inflatable material. The use of yarn groups and low yarn twist does reduce mass of coating required as taught in Howland. But today's technology uses films to control permeability in a separate layer in the laminate. The point is that this Applicant's novel methods and constructions are useful today because they also achieve optimal *structural* performance without excessive mass or the damaging affect of calendaring.

Phillips is silent on the specifics of yarn twist, which has been introduced as a limitation in independent claim 8. Phillips is also silent on the matter of a woven fabric layer with an aggregated strength greater than 10 grams per denier, and on a specific range of aspect ratio of the yarns, and on a specific range of yarn to fabric strength, as are variously enumerated in independent claims 50 and 59.

It is the Applicant's position for the reasons cited, that Phillips, whose disclosure is made in the context of the fabrics of the era expressly for permeability control by a process that is incompatible with and inapplicable to contemporary high strength, high density fabrics, does not provide a rational basis for rejecting the cited claims under either 35USC102 or 103, as it in no way anticipates or obviates independent claims 8, 50, and 59 as amended herein. For at least these reasons, Applicant respectfully requests reconsideration of all claims rejected hereunder.

Various 103 re Mater, Cuccias, Phillips

(20) Claims 13, 18, 19, 24, 48, 49, 57, 58, 65, and 66 are rejected under 35USC103(a) as being unpatentable over Mater in view of Cuccias. Applicant invokes its prior comments as to 102/103 rejections, the cited art, the cited claims, and responds as above that the Office's characterization of Mater having been seriously flawed; using the same mischaracterization in combination with Cuccias likewise fails to provide a rational basis for this or any rejection. Applicant requests the rejection be withdrawn and the claims reconsidered for at least this reason.

(21) The Office has rejected claim 15 under 35USC103(a) as being unpatentable over Phillips. Claim 15 being dependent on amended Claim 8, Applicant reiterates its prior comments with respect to 35 USC102, 103, the cited art, and to Claim 8; and asserts Claim 15 to be allowable at least by way of being a further limitation of claim 8. Applicant requests reconsideration for at least this reason.

(22) The Office has rejected claim 17 under 35USC103(a) as being unpatentable over Phillips. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, claim 17, and its parent claim 8. Applicant asserts further that the Office as here mischaracterized the purpose of the Applicant's reduced number of cross over points as being analogous to the purpose of Phillips, stating that it would be obvious that fewer crossing points contributes to the "flattening out" treatment. Nowhere does the Applicant acquaint or associate its reduced number of crossing points with "flattening out" of the fabric or yarn. It is well described in the Applicant's specification that the reduced number of crossing points contributes to *tear resistant*, which as was pointed out previously is not within the purview of the Phillips disclosure. For all of these reasons, Applicant requests reconsideration of the rejected claim.

(23) The Office has rejected claims 23, 41, 45, 54, and 61 under 35 USC103(a) as being unpatentable over Phillips. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, these claims and their parent claims all as amended. Claim 23 is dependent on amended claim 8, 45 on amended claim 41, 54 on amended claim 50, and 61 on amended claim 59. Applicant requests reconsideration of the rejected claims.

(24) The Office has rejected claims 10-13, 18, 19, 25, 55-58, and 63-66 under 35USC103(a) as unpatentable over Phillips in view of Cuccias. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, these claims and their parent claims all as amended. Moreover, referring to the prior discussion of Phillips, it would be patently clear to anyone skilled in the art that the calendaring and compression methodology of Phillips would never be applied to the construction of Cuccias, due to its destructive effect on the strength of the fibers, yarns and fabric as a whole. Clearly, there is no teaching, suggestion, or motivation to combine these references, in either the references themselves or in the knowledge generally available to one of ordinary skill in the art. For this reason, Applicant requests reconsideration of the rejected claims.

The Office has rejected claims 46-49 under 35USC103(a) as unpatentable over Phillips as applied to claim 41 above, and further in view of Cuccias. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, these claims and their parent claims all as amended. Applicant again asserts there to be a clear lack of any teaching, suggestion or motivation within or elsewhere in the art, to combine these particular two references, and respectfully requests reconsideration.

(25) The Office has rejected claims 14-17, 23, 41, 45-49, 54, 59, 61-66 under 35USC103(a) as unpatentable over Cuccias in view of Phillips. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, these claims and their parent claims all as amended. Applicant repeats its assertion that there is a clear lack of any teaching, suggestion or motivation within or elsewhere in the art, to combine these particular two references, and respectfully requests reconsideration.

(26) The Office has rejected claims 14-17 under 35USC103(a) as being unpatentable over Mater et al. in view of Phillips. Applicant invokes its prior comments with respect to 35USC102, 103, the cited art, these claims and their parent claims all as amended. Applicant repeats its assertion that the Office's interpretation of Mater was seriously flawed and its basis for any rejection, whether alone or in combination, is therefore not substantiated.

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,

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